Amendments to the Claims:

Please kindly amend the claims as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-120 (canceled)

1

121. (currently amended) A method of reducing or inhibiting angiogenesis in a tissue, comprising contacting $\alpha5\beta1$ integrin in the tissue with an $\alpha5\beta1$ antagonist that induces growth factor stimulated endothelial cell apoptosis and interferes with specific binding of the $\alpha5\beta1$ integrin to a ligand expressed in the tissue, thereby reducing or inhibiting angiogenesis in the tissue.

2

122. (currently amended) A method of reducing or inhibiting angiogenesis in a tissue in an individual, comprising administering to the individual an $\alpha5\beta1$ antagonist that induces growth factor stimulated endothelial cell apoptosis and interferes with the specific binding of $\alpha5\beta1$ integrin to a ligand expressed in the tissue, thereby reducing or inhibiting angiogenesis in the tissue in the individual.

3

123. (currently amended) A method of reducing the severity of a pathological condition associated with angiogenesis in an individual, comprising administering to the individual an $\alpha5\beta1$ antagonist that induces growth factor stimulated endothelial cell apoptosis and interferes with specific binding of $\alpha5\beta1$ integrin to a ligand in a tissue associated with the pathological condition, thereby reducing or inhibiting angiogenesis in the tissue, and reducing the severity of the pathological condition.

4

124. (previously presented) The method of claim 121, wherein the ligand is fibronectin.

5

125. (previously presented) The method of claim 121, wherein the tissue comprises ocular tissue.

126. (previously presented) The method of claim 125, wherein the ocular tissue is selected from the group consisting of retina, macula and cornea.

127. (previously presented) The method of claim 121, wherein the tissue comprises a neoplasm.

128. (previously presented) The method of claim 127, wherein the neoplasm is a malignant neoplasm.

129. (previously presented) The method of claim 128, wherein the malignant neoplasm is a metastatic malignant neoplasm.

130. (previously presented) The method of claim 128, wherein the malignant neoplasm is a carcinoma.

131. (previously presented) The method of claim 121, wherein the antagonist comprises a peptide.

132. (previously presented) The method of claim 131, wherein the peptide comprises the amino acid sequence CRRETAWAC (SEQ ID NO: 1).

133. (previously presented) The method of claim 121, wherein the antagonist is linked to a cytotoxin.

134. (previously presented) The method of claim 133, wherein the cytotoxin is a cancer chemotherapeutic drug.

135. (previously presented) The method of claim 122, wherein the individual is a human.

136. (previously presented) The method of claim 123, wherein the pathological condition is a neoplasm.

137. (previously presented) The method of claim 136, wherein the neoplasm is a malignant neoplasm.

16
138. (previously presented) The method of claim 137, wherein the malignant neoplasm is a metastatic malignant neoplasm.

17
139. (previously presented) The method of claim 137, wherein the malignant neoplasm is a carcinoma.

18
140. (previously presented) The method of claim 139, wherein the carcinoma is selected from the group consisting of a breast carcinoma, a colon carcinoma, an ovarian carcinoma and a pancreatic carcinoma.

19
141. (previously presented) The method of claim 137, wherein the malignant neoplasm is selected from the group consisting of a sarcoma, a mesothelioma, a teratocarcinoma, an astrocytoma, and a glioblastoma.

20
142. (previously presented) The method of claim 123, wherein the individual is a human.

21
143. (previously presented) The method of claim 123, wherein the antagonist is administered intravenously.

22
144. (previously presented) The method of claim 123, wherein the antagonist is administered orally.

23
145. (previously presented) The method of claim 136, wherein the antagonist is administered into a neoplasm.

24
146. (previously presented) The method of claim 123, wherein the pathological condition is associated with the eye.

25
147. (previously presented) The method of claim 146, wherein the pathological condition is selected from the group consisting of diabetic retinopathy and macular degeneration by neovascularization.

26
148. (previously presented) The method of claim 146, wherein the antagonist is administered in the form of eye drops.

27
149. (previously presented) The method of 146, wherein the antagonist is administered intravenously.

28
150. (previously presented) The method of claim 146, wherein the antagonist is administered orally.

29
151. (currently amended) The method of claim 123, wherein the antagonist is administered at a dose of ~~0.0001~~ 0.0001 to 100 mg/kg body weight.

Claims 152-157 (canceled)